

Technical Data Sheet

Estar™ Copolyester EB062

Applications

- Appliances (food contact)
- Baby bottles/sippy cups
- Blow molding
- Bottles-color cosmetics pkg
- Bottles-skin care pkg
- Color cosmetics packaging
- Commercial housewares
- Compounders
- Consumer housewares-nfc
- Equipment & machinery
- Fruit juice drinks packaging
- Home, garden & automotive packaging
- Jars-skin care pkg
- Liquor/wine packaging
- Packaging components non food contact
- Personal care & cosmetics packaging
- Personal care bottles
- Personal care packaging
- Skin care packaging
- Water packaging

Key Attributes

- Easy to extrude, cut, print, and seal
- Effective barrier properties
- Excellent chemical resistance
- Excellent clarity
- Excellent colorability
- Good impact strength
- Good stiffness
- High gloss appearance
- Toughness

Product Description

Estar™ Copolyester EB062 is a resin specifically developed for extrusion blown bottles where aesthetics such as high clarity and gloss, coupled with design flexibility, drive demand particularly in packaging for cosmetics and personal care. Compared to commonly used materials, Estar™ copolyester EB062 runs on most standard processing equipment. Extremely high melt strength makes the resin an excellent choice when manufacturing bottles. This product offers improved toughness, melt strength, chemical resistance, excellent color, and clarity in thick-walled applications. Estar™ Copolyester EB062 is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

Estar EB062 is cleared for various food contact applications (including contact with most alcoholic beverages) by FCN No. 1234 as described in the [Food and Drug Administration \(FDA\) Inventory of Effective Food Contact Substance Notifications](#) and may be used in full compliance with the United States Federal Food and Drug, and Cosmetic Act, provided that it is used within the limitations set forth for FCN 1234.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED

The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute (GEI). GEI is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. The GREENGUARD Certification Program is an industry independent, third-party testing program for low-emitting products and materials for indoor environments. For more information about GEI and to obtain printable certificates for Eastman™ Copolyesters, visit

. Choose Eastman Chemical Company under the Manufacturer category and click search to display a list of our products.

This product has been *CRADLE TO CRADLE CERTIFIED*™ Bronze, with Material Health Certificate, Platinum. The *CRADLE TO CRADLE CERTIFIED* mark is a registered certification mark used under license through the Cradle to Cradle Products Innovation Institute, a nonprofit organization that administers the publicly available *Cradle to Cradle Certified*™ Product Standard which provides designers and manufacturers with criteria and requirements for continually improving product materials and manufacturing processes. The *Cradle to Cradle Certified*™ Product Standard guides designers and manufacturers through a continual improvement process that looks at a product through five quality categories—material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness. A product receives an achievement level in each category—Basic, Bronze, Silver, Gold, or Platinum—with the lowest achievement level representing the product's overall mark.

The Material Health Certificate provides manufacturers with a trusted way to communicate their efforts to identify and replace chemicals of concern in their products. For more information about Cradle to Cradle certification and to obtain printable certificates for Eastman copolyesters, visit [Cradle to Cradle Certified](#). Search for Eastman Chemical Company in *Cradle to Cradle Certified* Products Registry.

Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^c
General Properties		
Density	D 792	1.25 g/cm ³
Mold Shrinkage	D 955	0.3 %
Mechanical Properties		
Tensile Stress @ Yield	D 638	47 MPa (6900 psi)
Tensile Stress @ Break	D 638	48 MPa (7000 psi)
Elongation @ Yield	D 638	5 %
Elongation @ Break	D 638	300 %
Tensile Modulus	D 638	1900 MPa (2.7 x 10 ⁵ psi)
Flexural Modulus	D 790	1900 MPa (2.7 x 10 ⁵ psi)
Flexural Strength	D 790	65 MPa (9400 psi)
Rockwell Hardness, R Scale	D 785	105
Izod Impact Strength, Notched ^d		
@ 23°C (73°F)	D 256	NB
@ -40°C (-40°F)	D 256	63C J/m (1.2C ft·lbf/in.)
Impact Strength, Unnotched ^e		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	NB
Impact Resistance (Puncture), Energy @ Max. Load		
@ 0°C (32°F)	D 3763	41 J (30 ft·lbf)
@ 23°C (73°F)	D 3763	41 J (30 ft·lbf)
@ -40°C (-40°F)	D 3763	39 J (29 ft·lbf)
Optical Properties		
Haze	D 1003	1.3 %
Gloss		
@ 60°	D 2457	143
Regular Transmittance	D 1003	87 %
Total Transmittance	D 1003	91 %
Color		
a*	D 2244	-0.2
b*	D 2244	0.6
L*	D 2244	95.0
Thermal Properties		
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	73 °C (163 °F)
@ 1.82 MPa (264 psi)	D 648	63 °C (145 °F)
Vicat Softening Temperature	D 1525	85 °C (185 °F)

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

^bUnless noted otherwise, the test method is ASTM.

^cUnits are in SI or US customary units.

^dC = Complete Break; Nonbreak as defined by ASTM D 256.

^eNonbreak as defined by ASTM D 4812.

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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